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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,527

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Isaac Samuel

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08/10/2006

Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

CASCA, FRED A

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/787,527

Applicant(s)

SAMUEL, ISAAC

Examiner

Fred A. Casca

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 19, 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-16 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 6-13 is/are rejected.
- 7) ☒ Claim(s) 3-5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

2. Claims 4 and 5 are objected to because claim 4 uses two different word choices to cover a characteristic of an element of the claim. In claim 4 line 2, please delete the word "controller" and insert the word -- collector -- therefore.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6-9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson et al (US 2001/0012778 A1), in view of Park et al (US 2003/0114159 A1).

Referring to claim 1, Eriksson discloses a wireless telecommunications network node (abstract and figures 1-2, "base station controller") comprising a processor configured to handle call traffic and to record measurement data (figures 1-3, paragraphs 22-26, "processors 210 and 230 each include a load monitor 234", "comparator-1 236", "BSC-1 includes a processor-1 210 for determining whether or not to handover at least one ongoing call . . . in view of the number of ongoing calls", note that the processor determines whether or not to handover a call in view of current load, thus the processor inherently records (registers) a measurement data (e.g., the number of ongoing calls)), the processor being configured to detect processor load and to

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automatically adjust dependent on detected processor load so as to keep the processor load within predetermined limits and the measurement records being event records that include call events (figures 1-3, paragraphs 22-30, “comparator-1 236 . . . compares a predetermined threshold . . . if a load indication message . . . must be generated”, “load indication message . . . is generated whenever . . . cell 110b changes so as to exceed or fall below a predetermined threshold”).

Eriksson does not specifically disclose automatically adjust **the rate of recordal of measurements** dependent on detected processor load.

Park discloses automatically adjust **the rate of recordal of measurements** dependent on detected processor load (abstract and paragraphs 75-80, “If each of the new call block rate and the handoff failure rate is maintained at the reference threshold value or less, the service quality provided in the cell is satisfied and thus any bandwidth adjustment is not required”, “call block rate and handoff failure rate are periodically monitored . . . to dynamic variation of the communication network . . . bandwidth is dynamically adjusted”, note that bandwidth adjustment corresponds to adjusting the number of calls allowed at a particular time frame, and adjusting the number of allowed calls corresponds to adjusting the rate of recording of measurements (e.g., when only a few number of calls are allowed within the boundaries of a particular base station controller, then inherently fewer call drops and fewer handovers would take place, thus fewer rate of recording of measurements of such call events)).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the network node of Eriksson by incorporating the teachings of Park into that of Eriksson by providing the processor of Eriksson to automatically adjust **the rate of recordal of**

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measurements dependent on detected processor load, motivation being for the purpose of reducing processor load and consequently providing an efficient wireless network).

Referring to claim 6, the combination of Eriksson/Park disclose a wireless telecommunication network node according to claim 1, and further disclose the measurement records are event records each comprising an indication of a call event experienced by a mobile user terminal and measurement of radio conditions experienced by the mobile user terminal (Eriksson, paragraphs 22-30, “traffic channels that are currently active”, note that active channels corresponds to calls in process which corresponds to call events).

Referring to claim 7, the combination of Eriksson/Park disclose a wireless telecommunications network node according to claim 6, and further disclose the measurement records also comprise data of geographical location of the mobile user terminal (Eriksson, figure1-2, and paragraphs 23-24, “handover at least one ongoing call from the cell 110b to cell 110f”, note that the cell identifications clearly indicate geographical location).

Referring to claim 8, the combination of Eriksson/Park disclose a wireless telecommunications network node according to claim 1, and further disclose an outlet port for transfer of measurement records to a remote network node (Eriksson, figure 2, and paragraph 29, “MSC/VLR”).

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Referring to claim 9, the combination of Eriksson/Park disclose a wireless telecommunications network node according to claim 1, and further disclose the node is controller configured to control at least one base station for wireless telecommunications to mobile user terminals (figures 1-3, "BSC").

Referring to claim 13, Eriksson discloses a method of controlling processor load in wireless telecommunications network node (abstract, figures 1-3, and paragraphs 22-26 "base station controller") comprising a processor, the processor handling call traffic and recording the measurement data (figures 1-3, paragraphs 22-26, "processors 210 and 230 each include a load monitor 234", "comparator-1 236", "BSC-1 includes a processor-1 210 for determining whether or not to handover at least one ongoing call . . . in view of the number of ongoing calls", note that the processor determines whether or not to handover a call in view of current load, thus the processor inherently records (registers) a measurement data (e.g., the number of ongoing calls)), the processor detecting processor load and automatically adjusting data dependent on detected processor load so as to keep the processor load within predetermined limits, and the measurement records being event records that include call events (figures 1-3, paragraphs 22-30, "comparator-1 236 . . . compares a predetermined threshold . . . if a load indication message . . . must be generated", "load indication message . . . is generated whenever . . . cell 110b changes so as to exceed or fall below a predetermined threshold").

Eriksson does not specifically disclose automatically adjust **the rate of recordal of measurements** dependent on detected processor load.

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Park discloses automatically adjust **the rate of recordal of measurements** dependent on detected processor load (abstract and paragraphs 75-80, “If each of the new call block rate and the handoff failure rate is maintained at the reference threshold value or less, the service quality provided in the cell is satisfied and thus any bandwidth adjustment is not required”, “call block rate and handoff failure rate are periodically monitored . . . to dynamic variation of the communication network . . . bandwidth is dynamically adjusted”, note that bandwidth adjustment corresponds to adjusting the number of calls allowed at a particular time frame, and adjusting the number of allowed calls corresponds to adjusting the rate of recording of measurements (e.g., when only a few number of calls are allowed within the boundaries of a particular base station controller, then inherently fewer call drops and fewer handovers would take place, thus fewer rate of recording of measurements of such call events)).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the network node of Eriksson by incorporating the teachings of Park into that of Eriksson by providing the processor of Eriksson to automatically adjust **the rate of recordal of measurements** dependent on detected processor load, motivation being for the purpose of reducing processor load and consequently providing an efficient wireless network).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson et al (US 2001/0012778 A1), in view of Park et al (US 2003/0114159 A1), further in view of Jannette et al (US 2002/0160811 A1).

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Referring to claim 2, the combinations of Eriksson/Park disclose a wireless telecommunication network node according to claim 1, and further disclose the processor comprising a processor load detector (Eriksson, figure 2, and paragraphs 22-30).

The combination of Eriksson/Park does not disclose a variable filter, the filter acting to discard a proportion of measurement reports received, the proportion being adjusted upon the processor load.

Jannette discloses a variable filter, the filter acting to discard a proportion of measurement reports received, the proportion being adjusted upon the processor load (paragraphs 32, 41, 42, 44).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the system of Eriksson/Park by incorporating the teachings of Jannette, motivation being for the purpose of avoiding system overloading.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson et al (US 2001/0012778 A1), in view of Park et al (US 2003/0114159 A1), further in view of Longoni (US 2002/0052206 A1).

Referring to claim 12, Eriksson discloses a wireless telecommunications network (abstract and figures 1-2) comprising an operations and maintenance centre, a controller, and a plurality of base stations under the control of the controller and configured for wireless telecommunications with mobile user terminals (abstract, figures 1-3, paragraphs 20-26, "MSC/VLR", "BSC", "BTS"), the controller comprising a processor configured to handle call traffic and to record measurement data (figures 1-3, paragraphs 22-26, "processors 210 and 230

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each include a load monitor 234”, “comparator-1 236”, “BSC-1 includes a processor-1 210 for determining whether or not to handover at least one ongoing call . . . in view of the number of ongoing calls”, note that the processor determines whether or not to handover a call in view of current load, thus the processor inherently records (registers) a measurement data (e.g., the number of ongoing calls)), the processor being configured to detect processor load and to automatically adjust dependent on detected processor load so as to keep the processor load within predetermined limits, and the measurement records being event records that include call events (figures 1-3, paragraphs 22-30, “comparator-1 236 . . . compares a predetermined threshold . . . if a load indication message . . . must be generated”, “load indication message . . . is generated whenever . . . cell 110b changes so as to exceed or fall below a predetermined threshold”).

Eriksson does not specifically disclose automatically adjust **the rate of recordal of measurements** dependent on detected processor load.

Park discloses automatically adjust **the rate of recordal of measurements** dependent on detected processor load (abstract and paragraphs 75-80, “If each of the new call block rate and the handoff failure rate is maintained at the reference threshold value or less, the service quality provided in the cell is satisfied and thus any bandwidth adjustment is not required”, “call block rate and handoff failure rate are periodically monitored . . . to dynamic variation of the communication network . . . bandwidth is dynamically adjusted”, note that bandwidth adjustment corresponds to adjusting the number of calls allowed at a particular time frame, and adjusting the number of allowed calls corresponds to adjusting the rate of recording of measurements (e.g., when only a few number of calls are allowed within the boundaries of a particular base station

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controller, then inherently fewer call drops and fewer handovers would take place, thus fewer rate of recording of measurements of such call events)).

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the network node of Eriksson by incorporating the teachings of Park into that of Eriksson by providing the processor of Eriksson to automatically adjust **the rate of recordal of measurements** dependent on detected processor load, motivation being for the purpose of reducing processor load and consequently providing an efficient wireless network).

The combination of Eriksson/Park does not disclose a wireless telecommunications network comprising a **radio network** controller.

Longoni discloses a wireless telecommunications network comprising a **radio network** controller (abstract, figure 1, "When the radio network controller has received the load information").

It would have been obvious to one of the ordinary skill in the art at the time of invention to modify the network of Eriksson/Park by incorporating the teachings of Longoni, and consequently replacing the base station controller of the network of Eriksson/Park by the radio network controller (RNC) of the Longoni, motivation being to provide load balancing and network communications efficiency with UMTS and other networks that use RNCs.

7. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eriksson et al (US 2001/0012778 A1), in view of Park et al (US 2003/0114159 A1), further in view of well known prior art (MPEP 2144.03).

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Referring to claim 10, the combination of Eriksson/Park disclose a wireless telecommunications network node according to claim 9.

The combination of Eriksson/Park does not disclose the node is radio network controller.

The examiner takes official notice of the fact that radio network controllers (RNC) are well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time invention to modify the system of Eriksson/Park by incorporating the teachings of prior art and letting the controller be an RNC so that the system is implemented with UMTS networks as well.

Referring to claim 11, the combination of Eriksson/Park disclose a wireless telecommunications network node according to claim 9.

The combination of Eriksson/Park does not disclose the node is radio network controller of a Universal Mobile Telecommunications System (UMTS) wireless telecommunications network.

The examiner takes official notice of the fact that radio network controllers of a Universal Mobile Telecommunications System (UMTS) are well known in the art.

It would have been obvious to one of the ordinary skill in the art at the time invention to modify the system of Eriksson/Park by incorporating the teachings of prior art and letting the controller be an radio network controller of a Universal Mobile Telecommunications System (UMTS) so that the system is implemented with UMTS networks as well.

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Allowable Subject Matter

8. Claims 14-16 are allowed.
9. Claim 3-5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred A. Casca whose telephone number is (571) 272-7918. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid, can be reached at (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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